**3.** Two youth clubs, *Eastyou* and *Westyou*, decided to raise money for charity by running a 5 km race.

All the members of the youth clubs took part and the time, in minutes, taken for each member to run the 5 km was recorded.

The times for the *Westyou* members are summarised in Figure 1.

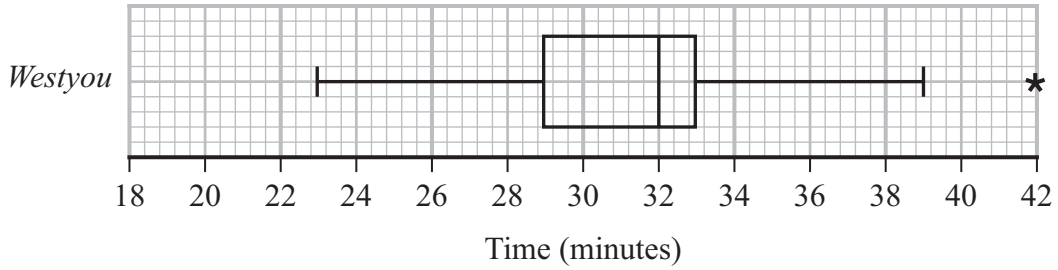



**Figure 1**

(a) Write down the time that is exceeded by 75% of *Westyou* members.

**(1)**

The times for the *Eastyou* members are summarised by the stem and leaf diagram below.

| Steam | Leaf | |
|---|---|---|
| 2 | 0 2 3 4 | (4) |
| 2 | 5 6 8 8 8 9 9 | (7) |
| 3 | 0 0 0 0 0 1 1 1 2 2 2 2 3 4 | (14) |
| 3 | 5 5 5 7 9 | (5) |

Key: 2 | 0 means 20 minutes

(b) Find the value of the median and interquartile range for the *Eastyou* members.

**(3)**

An outlier is a value that falls either

more than $1.5 \times (Q_3 - Q_1)$ above $Q_3$

or more than $1.5 \times (Q_3 - Q_1)$ below $Q_1$

(c) On the grid on page 11 of the Answer Book, draw a box plot to represent the times of the *Eastyou* members.

**(4)**

(d) State the skewness of each distribution. Give reasons for your answers.

**(3)**

**(Total for Question 3 is 11 marks)**